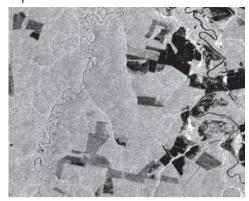
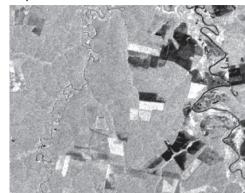
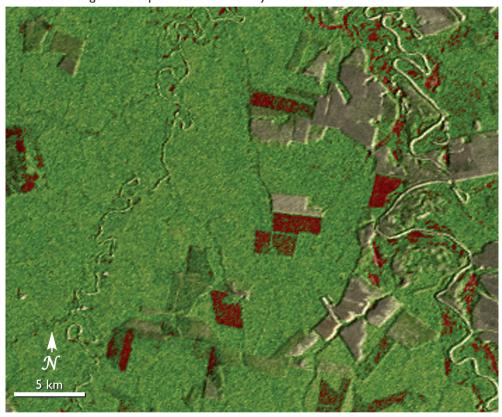
September 1995



May 1996



Landcover change from September 1995 to May 1996



Deforestation activity in a 20 km \times 30 km region of the Amazonian rain forest of South America between September 1995 and May 1996, demonstrating the powerful capability of satellite synthetic aperture radar for monitoring deforestation. Distributed through the area are regions deforested between the two observations shown in the top two images. The land cover change map derived from these two images illustrates the nature and progression of the deforestation activity. Felled trees which are left on the ground after clear-cutting can result in increased backscatter, indicated in red. Once the logs have been removed, the remaining low vegetation and open land surface results in decreased backscatter, indicated in gray, relative to the original forest. Green areas indicate regions that did not change between the observations. (Data from the SAR instrument on the Japanese Earth Resources Satellite (JERS-1); images © 1992–1998 NASDA/MITI, courtesy Global Rain Forest Mapping (GRFM) project; after Siqueria et al., Remote Sensing of Environment, 2003.)